

Technical challenges to climate change in Cambodian Agriculture

**Seminar on Building Small Holders' Resilience
under Climate Change through Value Chain Management**
Kunming, 18-20 September, 2017

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I. Country Review

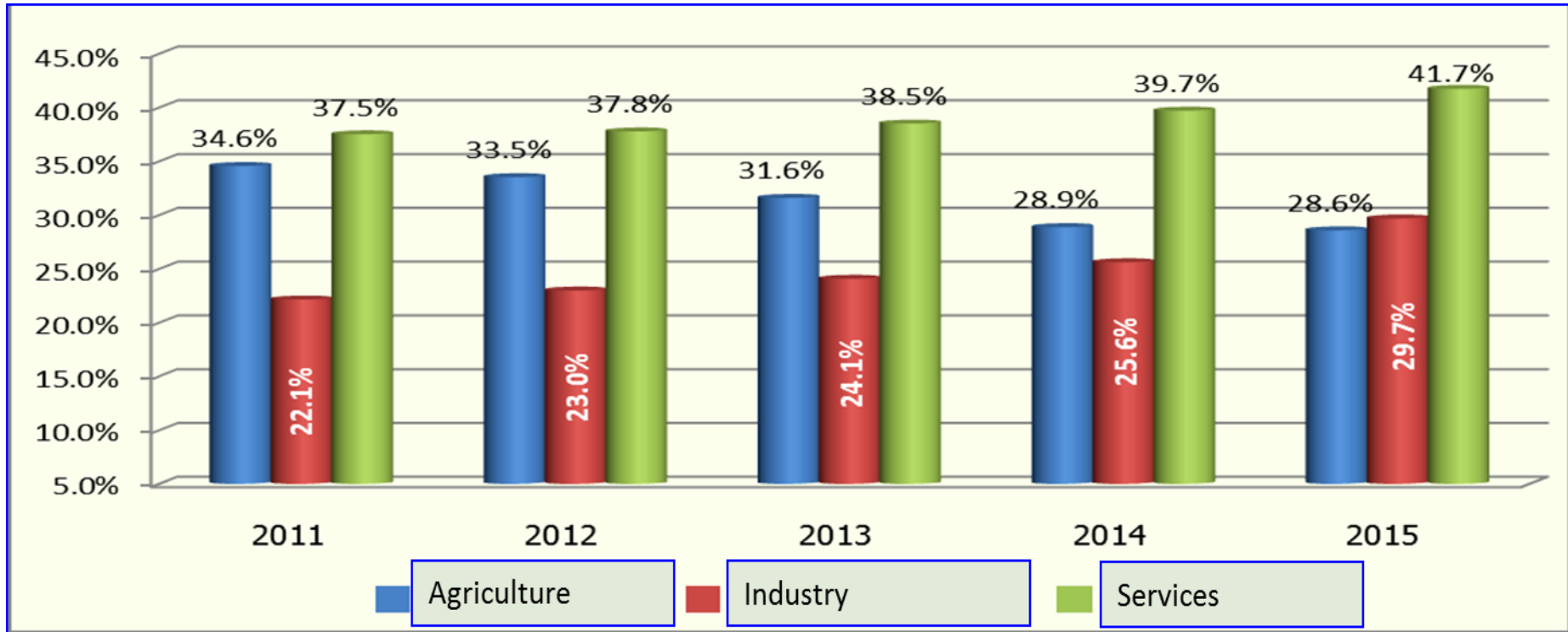


- ❖ Location: SEA and bordered with Vietnam, Laos and Thailand
 - Land border: 2,438Km
 - Coastline: 435Km
- ❖ Total area: 181,035km²
- ❖ Total population in 2016:
 - 15.9 millions (51 % are women)
- ❖ Population by Urban - Rural residence
 - ✓ Urban= 20%
 - ✓ Rural= 80 %
- ❖ Population growth: 1.64% per annum

II. General situation of Agriculture in Cambodia

- ❖ **Agriculture remains one of the most important sectors in Cambodia**
 - ❖ Main source of income for rural households
 - ❖ Employs **49%** of total labour force
 - ❖ Contributed **28.6%** to GDP in 2015 (decreasing from 34.6% in 2011)
- ❖ **Total cultivated area of 4,505,267 ha in 2013**
 - ❖ Rice: **68 %**
 - ❖ Subsidiary and industrial crops: **21 %**
 - ❖ Permanent crop: **4 %**
 - ❖ Rubber plantation: **7 %**
- ❖ **Employment in agriculture**: approximately 70% of population

III. Share of Agriculture sector in GDA



- The agriculture sector contribute to the GDP is about 28.6% in 2015, while industry sector is about 29.7% and services sector is about 41.7%. While in 2011, agriculture sector contribute to about 34.6%, industry sector is about 22.1% and services sector is about 37.5%.

IV. Current situation on Agriculture and Water

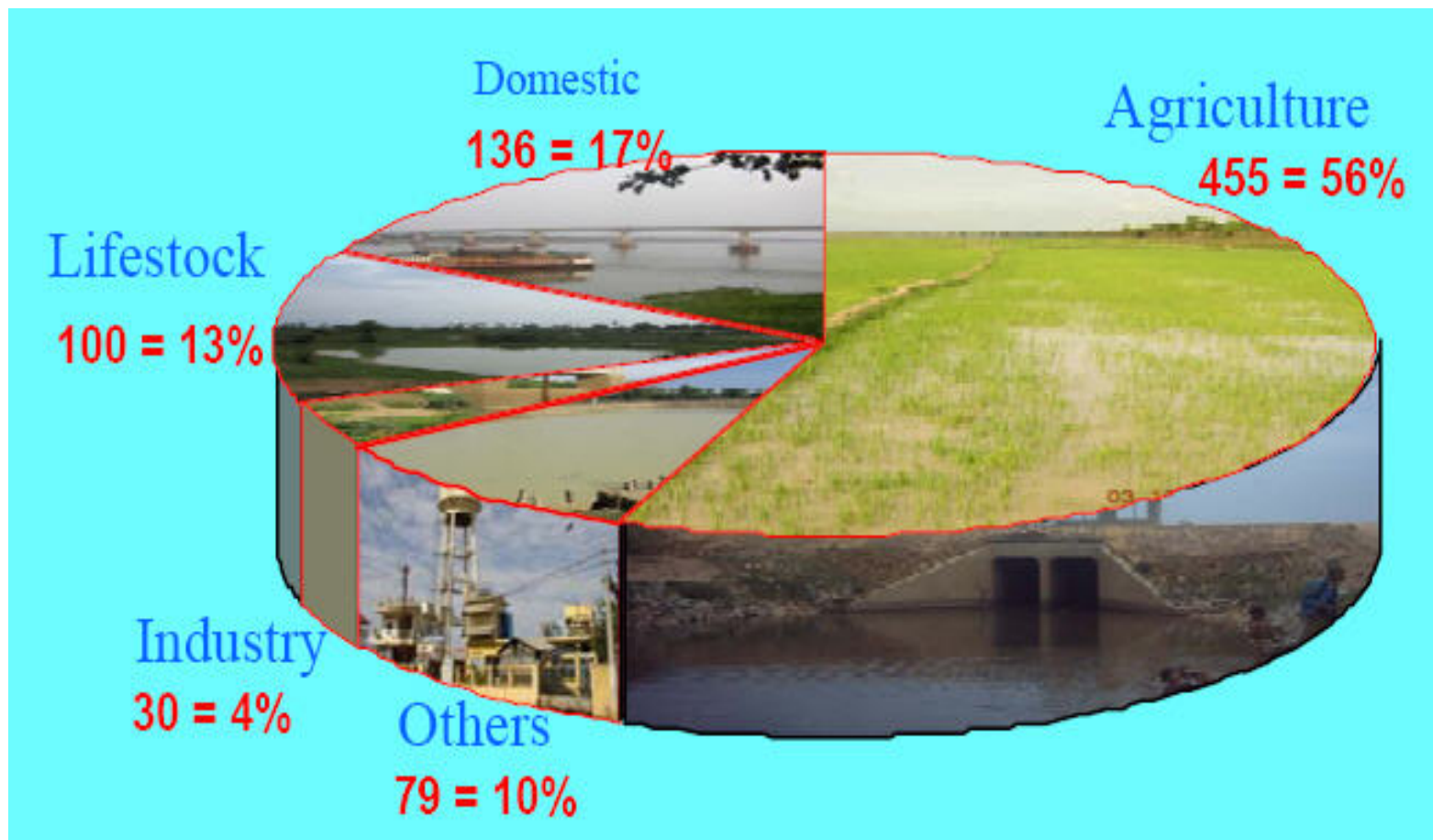
4.1. Land Use



Agriculture	24%
Forest covered	56%
Grass land	6%
Shrub land	10%
Soil-Rock	0.2%
Urban Built Up	0.1%
Water Body	3%

IV. Current situation on Agriculture and Water – *cont'd*

4.2 Water use in Cambodia



(800 million m³ /year)

IV. Current situation on Agriculture and Water – *cont'd*

4.3 Cultivation areas under all kinds of crops (ha) in 2016

Areas Under all crops	2016	Remarks
Areas for Rice Crop	3,118,143	Wet & dry seasons
Areas for subsidiary and industrial crops	1,034,970	Maize, Cassava, Sweet potatoes, vegetables, all kind of bean, sesame, sugar cane, tobacco, sugar cane, peanut, etc.
Areas for perennial crops	238,780	Cashew, mango, banana, oil palm, coconut, coffee, durian, orange, black pepper, and other fruit etc.
Areas for rubber plantation	432,734	
Total Areas	4,824,627	

V. Climate Change Strategy in Cambodia

- ❖ Cambodia has launched its climate change strategic plan from 2014 to 2023 in November, 2013;
- ❖ The main strategic objectives and directions for a climate-smart development of Cambodia in the next 10 years;
- ❖ It addresses a wide range of climate change issues linked to adaptation, GHG mitigation, and low-carbon development;
- ❖ The main goals of this strategy are:
 - ✓ *Reduce vulnerability to climate change impacts of people, in particular the most vulnerable and critical systems;*
 - ✓ *Shift towards a green development path by promoting low-carbon development and technologies; and*
 - ✓ *Promoting public awareness and participation in climate change response actions.*

VI. Challenges of Climate Change in Cambodian Agriculture

- ❖ Cambodia has insufficient capacity to translate information into knowledge for farmers to respond to climate change;
- ❖ No clear policies and strategies on climate change in agriculture,
- ❖ On farm infrastructure and small scale irrigation management are not well functioning, as results too much water in wet season, insufficient in dry season and more losses of farm products after harvesting;
- ❖ In appropriated uses of farm machinery and poor on farm infrastructure systems;
- ❖ Lack of water resources planning, monitoring, and management that respond to climate change; and
- ❖ Weather Index Cropping Insurance is not yet introduced; and
- ❖ Lack of cooperation with international and national organizations on mitigation and adaption to the effects of agricultural climate change.

VII. South-south cooperation

- Strengthen cooperation with international and national organizations on mitigation and adaptation to the effects of agricultural climate change;
- Clear policies and strategies on climate change in agriculture;
- Weather Index Cropping Insurance should be introduced widely;
- Introduce incentive mechanism for private investment in agriculture;
- Climate-Smart Agriculture through appropriate agricultural machinery uses should be addressed and supported;
- Promotion of custom hiring services for agricultural machinery that smallholder farmers are able to access services of agricultural machinery;
- Alternative solutions on water resources utilization such as ponds, small stream, etc. and minimize use of water for farming through precision agricultural technology; and
- Networking on climate change issues with different stakeholders, including gender and environmental impact should be established.

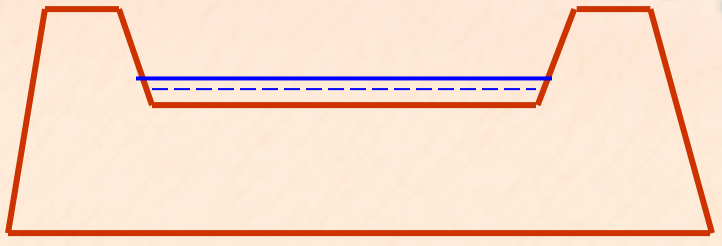
Innovation on appropriate agricultural engineering

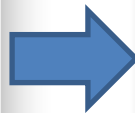
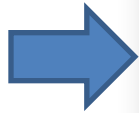


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Thank you for your attention